

**AMENDMENTS TO THE CLAIMS:**

Claim 1 (currently amended): A liquid treatment apparatus for performing a liquid treatment to process objects, comprising:

a process bath ~~adapted to contain~~ configured to contain a process liquid and ~~a process object~~ process objects therein;

~~a plurality of process liquid supply nozzles arranged at different levels beside the process objects in the process bath, each of the nozzles having a discharge port directed toward the process object contained in the process bath;~~

a plurality of process liquid supply nozzles disposed in the process bath and connected to a common process liquid supply source, the plurality of process liquid supply nozzles including:

a pair of first process liquid supply nozzles arranged at the same level on both sides of the process objects in the process bath, each of the first process liquid supply nozzles having a discharge port directed toward the process objects contained in the process bath; and

a pair of second process liquid supply nozzles arranged at the same level on both sides of the process objects in the process bath, each of the second process liquid supply nozzles having a discharge port directed toward the process objects contained in the process bath, and the second process liquid supply nozzles being located at a level different from that of the first process liquid supply nozzles;

a plurality of process liquid supply valves adapted to control that control a supply of the process liquid from ~~[[a]]~~ the common process liquid supply source to the process liquid supply nozzles; and

a sequence controller configured to control operations of the process liquid supply valves according to a predetermined sequence of operations, so that one or more process liquid supply nozzles selected from said plurality of process liquid supply nozzles discharge the process liquid in each of a plurality of process liquid supply periods, and that, a process liquid supply condition of at least one of said plurality of process liquid supply nozzles in each of the process liquid supply periods is different from that in an immediately preceding process liquid supply period both the first process liquid supply nozzles concurrently discharge the process liquid toward the process objects

immersed in the process liquid contained in the process bath, and thereafter both the second process liquid supply nozzles concurrently discharge the process liquid toward the process objects immersed in the process liquid contained in the process bath.

Claim 2 (currently amended): The liquid treatment apparatus according to claim 1, wherein ~~said plurality of process liquid supply nozzles are divided into a first group and a second group, the process liquid supply nozzles belonging to the first group are arranged at different levels on one side of the process object, and the process liquid supply nozzles belonging to the second group are arranged at different levels on another side of the process object~~ the plurality of process liquid supply nozzles include at least one additional pair of process liquid supply nozzles arranged at the same level on both sides of the process objects in the process bath, said additional process liquid supply nozzles being located at a level different from that of the first process liquid supply nozzles and the second process liquid nozzles.

Claim 3 (canceled)

Claim 4 (currently amended): The liquid treatment apparatus according to claim 1 ~~claim 3~~, wherein:  
the liquid treatment is a treatment that treats the process objects ~~object~~ with a chemical liquid as the process liquid; and  
the controller is configured to control the process liquid supply valves so that one of the process liquid supply nozzles of the first group and one of the process liquid supply nozzles of the second group, which are arranged at the same level, simultaneously discharge the process liquid at least in a part of said plurality of process liquid supply periods.

Claim 5 (canceled)

Claim 6 (currently amended): The liquid treatment apparatus according to claim 1, wherein:

the liquid treatment is a treatment that treats the process ~~objects~~ object with a rinse liquid as the process liquid; and

the plurality of process liquid supply nozzles include a pair of lowermost process liquid supply nozzles arranged at the same level on both sides of the process objects at a bottom of the process bath; and

the controller is configured to control the process liquid supply valves so that a ~~lowermost one of said plurality of process liquid supply nozzles arranged at different levels discharges the~~ lowermost process liquid supply nozzles discharge the rinse liquid, and thereafter the lowermost process liquid supply ~~nozzle~~ nozzles and at least one pair of process liquid supply nozzles selected from the process liquid supply nozzles other than the lowermost process liquid supply ~~nozzle~~ nozzles discharge the rinse liquid.

Claim 7 (currently amended): The liquid treatment apparatus according to claim 6, wherein the controller is configured to control the process liquid supply valves so that the lowermost process liquid supply ~~nozzle discharges~~ nozzles discharge the rinse liquid, and thereafter all the process liquid supply nozzles discharge the rinse liquid.

Claim 8 (currently amended):      The liquid treatment apparatus according to ~~claim 3~~, claim 1 wherein:

the liquid treatment is a treatment that treats the process ~~object~~ objects with a rinse liquid as the process liquid; and

the controller is configured to control the process liquid supply valves so that, at least in one of said a plurality of process liquid supply periods, ~~one of the process liquid supply nozzles belonging to the first group discharges the first process liquid supply nozzles discharge~~ the rinse liquid while the process liquid supply nozzle belonging to the second group arranged at a level corresponding to that of said ~~one of the process liquid supply nozzles belonging to the first group~~ does the second process liquid supply nozzles do not discharge the rinse liquid.

Claim 9 (currently amended):      The liquid treatment apparatus according to claim 1, wherein:

the liquid treatment is a treatment that treats the process ~~object~~ objects with a chemical liquid diluted with a rinse liquid, as the process liquid;

the common process liquid supply source includes a chemical liquid supply source and a rinse liquid supply source;

a chemical liquid supply line connected to the chemical liquid supply source merges into a process liquid supply line, which connects the rinse liquid supply source to the process liquid supply nozzles;

the chemical liquid supply line is provided with a flow control device adapted to control a flow rate of the chemical liquid flowing from the chemical liquid supply line into the process liquid supply line;

and the controller is configured to control the flow control device depending on a flow rate of the process liquid being supplied to the process liquid supply nozzles through the process liquid supply line so that a concentration of a chemical component in the process liquid is maintained substantially constant.

Claim 10 (currently amended): The liquid treatment apparatus according to claim 9, wherein: the controller is configured to control the process liquid supply valves so that the number of the process liquid supply nozzles discharging the process liquid in one of ~~the~~ a plurality of process liquid supply periods is different from that of the process liquid supply nozzles discharging the process liquid in another process liquid supply period following said one of the process liquid supply periods; and

the controller is also configured to control the flow control device depending on the number of the process liquid supply nozzles discharging the process liquid, so that the concentration of the chemical component in the process liquid flowing through the common process liquid supply line in said one of the process liquid supply periods is identical to that in said another process liquid supply period.

Claim 11 (original): The liquid treatment apparatus according to claim 9, wherein the flow control device is adapted to shut off a flow of the chemical liquid from the chemical liquid supply line into the process liquid supply line, thereby allowing said apparatus to selectively perform the liquid treatment using the chemical liquid diluted with the rinse liquid, or a liquid treatment using only the rinse liquid.

Claims 12-19 (canceled)

Claim 20 (new): The liquid treatment apparatus according to claim 1, wherein the first process liquid supply nozzles are configured to discharge the process liquid substantially horizontally, and the second process liquid supply nozzles are configured to discharge the process liquid substantially horizontally.